

WORKING DRAFT #3

February 10, 2000

MEMORANDUM FOR Chester E. Bowie
 Chief, Demographic Surveys Division

From: Alan R. Tupek
 Chief, Demographic Statistical Methods Division

Subject: Specifications for Weighting the National Based Metropolitan Data Used
 for Producing 1999 Metropolitan Level Publications and User Files for
 AHS-MS/N

I. INTRODUCTION

Due to constraints in the budget, the AHS-MS did not interview samples in 6 metropolitan areas. However, the sponsor still wants to produce metropolitan level user files and publications for these areas. To accomplish this we will use sample cases that were interviewed in these areas during the 1999 AHS-N to produce the 1999 metropolitan level publications and user files. We will refer to these areas as AHS-MS/N areas.

These AHS-MS/N areas include:

- C Chicago IL, PMSA.
- C Detroit MI, PMSA.
- C New York-Nassau-Orange-Suffolk NY, PMSAs.
- C Northern NJ, PMSAs.
- C Los Angeles-Long Beach CA, PMSA.
- C Philadelphia PA-NJ, PMSA.

Terms with an asterisk (*) next to them are defined in the glossary. For all geography based variables, use the 1980 based variables.

This memorandum contains the specifications for computing the final weights needed for the AHS-MS/N areas. Section II defines the sample areas. Section III identifies the input files needed for the weighting specification. Section IV describes the weighting procedure for the six selected

areas. Section V provides the detailed weighting specifications. Included in Section V are the file locations in which the factors are located. Use these files to obtain all information necessary in the weighting process. Section VI contains all output requests. The attachments to these specifications contain a hard copy of all information in the files for documentation purposes.

II. IDENTIFICATION OF SAMPLE AREAS

A. In order to maximize the sample size that was interviewed in the AHS-MS/N areas, the supplemental sample* from the AHS-N was added to the basic* sample from the AHS-N. For each of the AHS-MS/N areas which are defined in Table 1 in Attachment A use the following sample in the weighting process.

1. Los Angeles:

We will use all of the 1999 AHS-N sample (both basic and supplemental) from the urbanized* areas of this MS and use only the supplemental sample from the urban* outside urbanized areas* or from rural* areas and show this combined geography (**other urban/rural***) for these cases. We can include the supplemental sample cases in the other urban and rural areas of Los Angeles on the user file. Since the other urban and rural populations of Los Angeles are both < 100,000 (minimum geographic area that can be identified on data files), we must use the combined geography which is > 100,000 in population. Since the basic sample* in other urban and rural areas will be identified on the user file for 1999 AHS-N as being in metro areas in the West but not Los Angeles specifically, the MS file can't include any of these cases. Otherwise, the two files could be matched and other urban/rural cases in Los Angeles would be identified on the AHS-N file which would violate our confidentiality restrictions.

As a result,

- C In urbanized areas all of the basic and supplemental sample cases were included in the 1999 AHS-N sample. Include these cases in the AHS-MS/N weighting.
- C In other urban/rural areas, include only the supplemental sample cases in the AHS-MS/N weighting.
- C We will use the same sample for the publication and the user file.

2. Chicago, Detroit, New York, New Jersey and Philadelphia:

We will use all of the 1999 AHS-N basic and supplemental sample cases. Note that for

New Jersey we are including the Mercer County sample in this MS.

We will use the **same** sample for the publication and the user file for Chicago, Detroit, New Jersey and Philadelphia.

We will use **different** samples for the user file and the publication for New York. The 1999 **publication** for New York will be based on the AHS-N basic and supplemental sample in urbanized areas as well as in other urban/rural areas. This sample will be included in the weighting process. The **user** file will use the 1999 publication sample after excluding the urbanized area sample cases in Orange County. Special weights will not be calculated for the user file to compensate for dropping sample in Orange County.

B. We will split the sample in Section A into the following 2 groups for processing.

Group 1

This group consists of all cases (supplemental only) in the other urban/rural areas for Los Angeles.

Assign a group code = 1 and provide a count of the cases with group code = 1.

For Group 1, use the base weights* and weighting control factors* that were assigned to the AHS-N master file. **Assign** the sample adjustment factors*.

Group 2

This group consists of:

All basic and supplemental sample cases in urbanized areas for:

C Los Angeles.

All basic and supplemental sample cases for:

C Chicago.
 C Detroit.
 C New York.
 C Northern New Jersey.
 C Philadelphia.

Exclude the F5 rural sample cases in PSUs in New Jersey and New York: 34027, 34035,

36079, 36087 and 36103.

Assign a group code = 2 and provide a count of the cases with group code = 2.
For Group 2, use the base weights and weighting control factors that were assigned to the AHS-N master file. **Assign** the sample adjustment factors.

Exclude the urbanized area sample cases in Orange County when creating the New York user file.

III. INPUT FILES

Use the 1999 AHS-N master file to create a SAS file of data records that are to be included in the AHS-MS/N weighting procedure.

- A. When creating the AHS-MS/N data file to be used in the weighting process, use Table 1 in Attachment A and the definitions for Groups 1 and 2 to determine which sample cases should be included. Include only the AHS-N sample cases in the current enumeration* (cyenum==1=) in the PSUs in Table 1. Include all of the cases in these PSUs for AHS-MS/N weighting with the following exception:

- C **Exclude** the other urban/rural cases in the basic sample in all PSUs in Los Angeles.

This table should also be used to assign the appropriate AHS-MS Code to the AHS-MS/N sample.

- B. Match the SAS data set to the 1999 AHS-N current year data file and the prior year data file to create the 1999 AHS-MS/N data file. **Exclude** prior year type C noninterview units from the weighting file. If needed, we will be able to access the prior year type C noninterview units from the master file.

IV. FINAL WEIGHT

Each housing unit record will receive a final weight. The final weight is the product of the following components (the variable names to be used in the weighting process are in parentheses):

- C Base Weight (BASICWGT)
- C Weighting Control Factor (FINWCF)
- C Sample Adjustment Factor (SAMPFAC)
- C Type A Noninterview* Adjustment Factor (TAF)

Ⓒ Independent Total Housing Unit Ratio Estimation Factor (ITHUREF)

Multiply the above weights and factors to determine the final weight which will be

$\text{BASICWGT} \times \text{FINWCF} \times \text{SAMPFAC} \times \text{TAF} \times \text{ITHUREF}$.

FOR EACH STEP IN THE WEIGHTING PROCEDURE WHERE A SPECIFIC FACTOR WAS NOT CALCULATED, ASSIGN A VALUE OF 1.00 TO THE FACTOR.

Assign a value of zero to the normal final weight location on the records for all

Ⓒ Out-of-scope units*.

Ⓒ Noninterviews.

Assign these units a final weight composed of the above components, but store it in a separate location.

V. DETAILED WEIGHTING SPECIFICATIONS

A. Base Weight (BW)

Use the appropriate base weights that were assigned to the AHS-N master file for all of the sample cases in each of the six metropolitan areas.

Refer to the memorandum dated March 31, 1999 from Alan R. Tupek to Chester E. Bowie titled, "American Housing Survey - National Sample (AHS-N): Assignment of Base Weights to the Master File", for a detailed description of the assignment of the base weights to the master file.

We have included the base weights in Table 2 in Attachment A for documentation purposes.

B. Weighting Control Factor (WCF)

Use the appropriate WCFs that were assigned to the AHS-N master file for all of the sample cases in each of the six metropolitan areas.

Refer to Section V of the 1999 AHS-N weighting specifications for a detailed description of

the WCFs and the procedure that was used to calculate the final WCFs.

C. Sample Adjustment Factor (SAF)

1. Group 1

The sample adjustment factors to be assigned for Group 1 sample units will be provided in Table 1 in Attachment B. Use the following fields to assign the sample adjustment factors for these units:

- C AHS-MS Code (Table 1 - Attachment A).
- C Urbanized area code*.
- C Urban/rural code*.
- C Census design for permit segments*.
- C Segment type*.
- C Group Quarters (GQ) code*.

Provide the output listed in Section VI.D.

2. Group 2

The sample adjustment factors to be assigned for Group 2 sample units will be provided in Tables 2, 3, and 4 in Attachment B.

Note: these SAFs are the calculated ratios of the modified 1995 AHS-N base weights and the regular AHS-N base weights.

a. New York/New Jersey

The SAFs in Table 2 in Attachment B include the following PSUs in the New York/New Jersey metropolitan area:

- < PSU 34003 B Bergen County, NJ
- < PSU 34013 B Essex County, NJ
- < PSU 36059 B Nassau County, NY
- < PSU 36119 B Westchester County, NY.

The only segment type that has unique SAF assignments for these PSUs is address segments*.

The four characteristics of importance in the SAF assignments for address segments in the New York/New Jersey metropolitan area are

- < PSU
- < Tenure* (i.e., owner or renter)
- < Urban/rural (1980 design)
- < MSA status* (1980 design).

Use the stratum codes* from the following table for tenure for units in the address segments only:

Description of Tenure	Stratum Code
Owner	1 - 19, 44 - 49
Renter	20 - 43

Use the 1980 design urban/rural code URBRUR80 to distinguish land use (1 = urban, 2 = rural).

Use a value of 1 in 1980 design MSA status code to distinguish central city (MSASTA80 = 1).

b. Los Angeles

The SAFs in Table 3 in Attachment B include the following PSUs in the Los Angeles metropolitan area:

- < PSU 06037 - Los Angeles County, CA (1980 & 1990 design units)
- < PSU 06999 - Los Angeles County, CA (1980 design units).

The four characteristics of importance in the SAF assignments in the Los Angeles metropolitan area are

- < Segment type
- < Urban/rural (1980 design)
- < Urbanized area (1980 and 1990 design)
- < Census design (1980 and 1990 for permit segment).

Use the 1980 design urban/rural code URBRUR80 to distinguish land use (1 = urban, 2 = rural).

Use the sampling base year variable to distinguish the 1980 and 1990 design units in Los Angeles.

- < 1980 design units: SAMPLEYR = 80
- < 1990 design units: SAMPLEYR = 90.

Use the urbanized area code UACODE80 for the 1980 design units (0 = outside urbanized area).

Use the urbanized area code UACODE90 for 1990 design units (9999 = outside urbanized area).

Use the sampling base year variable to distinguish the difference in census design for permit segments.

- < 1980 design permit segments: SAMPLEYR = 80
- < 1990 design permit segments: SAMPLEYR = 90.

c. Philadelphia, Chicago, and Detroit

The SAFs in Table 4 Attachment B include the following PSUs in the Philadelphia metropolitan area:

- < PSU 34005 - Burlington County, NJ
- < PSU 34007 - Camden County, NJ
- < PSU 34015 - Gloucester County, NJ
- < PSU 42017 - Bucks County, PA
- < PSU 42029 - Chester County, PA
- < PSU 42045 - Delaware County, PA
- < PSU 42091 - Montgomery County, PA
- < PSU 42101 - Philadelphia County, PA.

The SAFs in Table 4 in Attachment B include the following PSUs in the Chicago metropolitan area.

- < PSU 17031 - Cook County, IL
- < PSU 17043 - DuPage County, IL
- < PSU 17063 - Grundy County, IL
- < PSU 17089 - Kane County, IL
- < PSU 17093 - Kendall County, IL
- < PSU 17097 - Lake County, IL
- < PSU 17111 - McHenry County, IL
- < PSU 17197 - Will County, IL

- < PSU 17308 - Cook, DuPage, IL
- < PSU 17398 - DuPage, Grundy, Kane, Kendall, Lake, McHenry, Will, IL.

Note: PSUs 17308 and 17398 contain 1980 design units while the other PSUs (17031, 17043, 17063, 17089, 17093, 17097, 17111, 17197) contain 1990 design units.

The SAFs in Table 4 in Attachment B include the following PSUs in the Detroit metropolitan area.

- < PSU 26087 - Lapeer County, MI
- < PSU 26093 - Livingston County, MI
- < PSU 26099 - Macomb County, MI
- < PSU 26115 - Monroe County, MI
- < PSU 26125 - Oakland County, MI
- < PSU 26147 - St. Clair County, MI
- < PSU 26163 - Wayne County, MI.

The three characteristics of importance in the SAF assignments in the Philadelphia, Chicago and Detroit metropolitan areas are

- < Segment type
- < Urban/rural (1980 design)
- < Census design (1980 and 1990 for permit segment).

Use the 1980 design urban/rural code URBRUR80 to distinguish land use (1 = urban, 2 = rural).

Use the sampling base year variable to distinguish the difference in census design for permit segments.

- < 1980 design permit segments: SAMPLEYR = 80
- < 1990 design permit segments: SAMPLEYR = 90.

D. Type A Noninterview Adjustment Factor (TAF)

Include in all noninterview adjustment calculations in this section:

- C Regular occupied interviewed units
- C Type A noninterview units

Exclude from all noninterview adjustment calculations, units classified as follows based on their 1999 interview status:

- C Usual Residence Elsewhere (URE)* interviewed units.
- C Current year vacant* interviewed units.
- C Out-of-scope units.
- C Type B noninterview units*.
- C Type C noninterview units*.

1. Data Needed for Cell Determination

For the **two groups**, use the following interview and noninterview data characteristics for the calculation of the Type A Noninterview Adjustment Factor. The data characteristics were obtained as a result of matching the sample cases in each of the six metropolitan areas to the 1999 AHS-N data file and the prior year data file. The data characteristics are found on the AHS-MS/N data file.

- C Number of Rooms*.
- C Sector*.
- C Segment Type.
- C Tenure.
- C Units in Structure*.
- C Urban/Rural*.
- C Value*.
- C Year of Introduction*.

2. Noninterview Adjustment Cells

Calculate the TAF separately for each AHS-MS/N area by the following three categories. Assign units to the categories based on data retrieved from the prior year data file when available. If no such data is available, use Table 3 in Attachment C.

1. Owner-occupied* or owner vacant* units (at the time of the previous interview) with complete previous data available.
2. Renter-occupied*, renter vacant* or year* round, seasonal* and migratory vacant units (at the time of the previous interview) with complete previous data available.
3. All other interviews and Type A noninterviews which include:
 - C Other vacant units with incomplete or no previous data available.
 - C Occupied units with incomplete or no previous data available.

The third category will include new new construction* and old new construction* cases in

the permit segments*.

Use Tables 1-3 in Attachment C for the noninterview adjustment cells and scale values*. The table number corresponds to the group in the above list. We will provide the scale values in an ASCII file.

Use the following procedure to calculate the TAF for each of the noninterview tables.

Additionally, calculate an overall Type A Noninterview Adjustment Factor. There will be three overall factors for each of the AHS-MS/N areas.

CALCULATION

1. For each of the noninterview tables obtain the following counts.

Let WIC_i = weighted count (currently BASICWGT x FINWCF x SAMPFAC) of occupied interviewed housing units* for each cell,

$WNIC_i$ = weighted count of Type A noninterview housing units for each cell,

UIC_i = unweighted count of occupied interviewed housing units for each cell, and

$UNIC_i$ = unweighted count of Type A noninterview housing units for each cell.

2. Compute the factor using the following steps.

Step 1 Start with the cell in Table 1 in Attachment C having the smallest scale value.

Step 2

Compute the Type A Noninterview Adjustment Factor,

$$TAF = \frac{WIC_i + WNIC_i}{WIC_i}$$

If the cell satisfies both conditions,

- (a) $UIC_i \leq 20$ if $UNIC_i > 0$,
- (b) $TAF < 1.500$

then go to Step 7. If the cell does not satisfy both conditions, go to Step 3.

Step 3 Collapse the cell with the cell having the nearest scale value (smallest absolute difference).

Step 4 Compute the scale value for the newly created cell by taking the average of the

$$New\ Scale\ Value = \frac{Scale\ Value_1 + Scale\ Value_2}{2}$$

two scale values.

Step 5 Compute the Type A Noninterview Adjustment Factor for the collapsed cell.

$$TAF = \frac{WIC_i + WNIC_i}{WIC_i}$$

where WIC_i = the sum of the weighted counts of occupied interviewed housing units for the two cells collapsing together, and
 $WNIC_i$ = the sum of the weighted count of Type A noninterview housing units for the two cells collapsing together.

Step 6 Go to Step 2.

Step 7 Select the cell with the next highest scale value.

Step 8 Go to Step 2.

Repeat the steps until all cells or collapsed cells in Tables 1-3 of Attachment C satisfy the conditions in Step 2.

For each of the three categories in Section V.D.2., calculate the overall TAF.

Let WIC_i = the weighted count (currently BASICWGT x FINWCF x SAMPFAC) of all occupied interviewed housing units (This number will be equal to the sum of the total number of units in each table.), and

$WNIC_i$ = the weighted count of all Type A noninterview housing units (This number will be equal to the sum of the total number of units in each table.).

The overall factor is

APPLICATION
$$TAF = \frac{WIC_i + WNIC_i}{WIC_i}$$

To apply the noninterview adjustment factors:

For each occupied interviewed housing unit, determine to which final (after collapsing) noninterview cell it belongs.

Assign a value of 1.00 to the TAF for all units for which a TAF was not calculated.

Multiply the unit's present weight (BASICWGT x FINWCF x SAMPFAC) by the factor calculated for the noninterview cell.

Do **not** apply the overall TAF to any units.

Thus, the new weight is BASICWGT x FINWCF x SAMPFAC x TAF.

Save the Type A Noninterview Adjustment Factors.

Refer to Section V.I.E. for the required output.

E. Independent Total Housing Unit Ratio Estimation Factor (ITHUREF)

Calculate the Independent Total Housing Unit Ratio Estimation Factors (ITHUREFs) separately for each geographic area of each MSA defined in Attachment D. Additionally, calculate an overall ITHUREF for each MSA.

Exclude:

- C Out-of-scope units.
- C All noninterviewed units.

Include:

- C All other units.

Calculation

1. Numerator (Independent Estimate) - Use the Independent Estimate for Area i from Attachment D. We will provide the independent estimates in the following ASCII file: /ahshare/n1999/wgt6m/independent_estimates.dat
2. Denominator (Sample Estimate) - Determine the weighted estimate (current weight is *BASICWGT x FINWCF x SAMPFAC x TAF*) of interviewed housing units in Area i.
3. The factor for Area i is

$$\text{ITHUREF} = \frac{\text{Independent Estimate of HUs in Area } i}{\text{Sample Estimate of HUs in Area } i}$$

4. The overall ITHUREF for the whole MSA with geographic subareas 1 through N uses the same numbers in the numerator and denominator and is

$$\text{ITHUREF} = \frac{\text{Independent Estimate of HUs in Area 1} + \dots + \text{Area N}}{\text{Sample Estimate of HUs in Area 1} + \dots + \text{Area N}}$$

APPLICATION

Apply the ITHUREF computed at the geographic subarea level to:

- C Occupied housing units.
- C Vacant/URE housing units.
- C Out-of-scope units.

- C Type A noninterviews.
- C Type B noninterviews.
- C Type C noninterviews.

Do not apply the **overall** ITHUREF to any housing units.

The final weight is $\text{BASICWGT} \times \text{FINWCF} \times \text{SAMPFAC} \times \text{TAF} \times \text{ITHUREF}$.

Refer to Section VI.F. for the required output.

VI. OUTPUT

Provide LSB with a SAS data set after each step of the weighting process.

All output listed below is requested separately for each of the AHS-MS/N areas.

Please provide row and column totals for all counts in the printouts unless otherwise specified.
For all hard copy output requests, DSMD expects 1 file for each of the AHS-MS/N areas.

A. Verification of Groups

Provide a SAS data set of the AHS-MS/N sample with the following information for **Groups 1 and 2**:

- C Urbanized area code.
- C Urban/Rural.
- C Sample designation.
- C Reduction group code*.
- C Group code.
- C AHS-MS code.
- C 1990 PSU code.
- C Supplemental sample flag*.

We will use this information to verify the groups are defined correctly.

B. Base Weight

The base weights were verified as part of the AHS-N master file verification procedure. We will verify the base weights by matching the AHS-MS/N weighting file to the AHS-N master file.

C. Weighting Control Factor

The WCFs were verified as part of the AHS-N master file verification procedure. We will verify the WCFs by matching the AHS-MS/N weighting file to the AHS-N master file.

D. Sample Adjustment Factor

For **Group 1**, provide a SAS data set with the following information for all of the records from each segment type:

- C AHS-MS code.
- C 1980 based Control Number
(PSU, Segment # including suffix, AHS serial #, sample designation and check digit).
- C 1990 based Control Number
(PSU, Segment # including suffix, AHS serial # and sample designation).
- C Segment Type.
- C Census Design for Permit Segments.
- C Urban/Rural.
- C Urbanized Area Code.
- C GQ Code.
- C Base Weight.
- C Weighting Control Factor.
- C Sample Adjustment Factor.
- C Group code.

We will verify the sample adjustment factors for **Group 2** using the 1999 AHS-N weighting file.

For **Group 2**, calculate the total weighted and unweighted count of housing units ($\text{BASICWGT} \times \text{FINWCF} \times \text{SAMPFAC}$) for the following (Refer to Attachment E for an example of the output format):

- C urbanized and other urban/rural areas in both the basic and supplemental samples from Chicago, Detroit, New York, Northern New Jersey and Philadelphia (Table 1).
- C urbanized areas in both the basic and supplemental samples from Los Angeles (Table 2).

We will verify these counts from the output we generate from the 1999 AHS-N file.

E. Type A Noninterview Adjustment Factor

Before the application of the TAF, the weight is equal to $\text{BASICWGT} \times \text{FINWCF} \times \text{SAMPFAC}$.

1. Provide a hard copy with the following counts for each cell in the noninterview cell Tables 1-3 in Attachment C. Also provide row and column totals.

Provide the following before collapsing:

- C weighted and unweighted counts of occupied interviewed HUs before application of the TAF (WIC, UIC).
- C weighted and unweighted counts of Type A noninterviews before application of the TAF (WNIC, UNIC).
- C Type A Noninterview Adjustment Factor (TAF).
- C scale values (SCALE).

Refer to Table 3 in Attachment E for an example of the desired output format. These tables will be used by DSMD to verify cell classification.

2. Additionally, sort the cells of Tables 1-3 in Attachment C by the original scale value (before collapsing) in ascending order. Provide hard copies of the following before and after collapsing:

- C scale values (SCALE, CSCALE).
- C weighted and unweighted counts of occupied interviewed housing units (WIC, UIC) before application of the TAF.
- C weighted and unweighted counts of Type A noninterviews (WNIC, UNIC) before application of the TAF.
- C TAF.

Provide the following counts only after collapsing:

- C weighted counts of occupied interviewed housing units (WFIC) after application of the TAF.
- C weighted counts of type A noninterviews (WFNIC) after application of the TAF.
- C weighted total counts of WFIC and WFNIC for each table.

Refer to Table 4 in Attachment E for an example of the desired output format. These tables will be used by DSMD to verify the collapsing process.

3. Provide a printout of the overall TAFs before collapsing.

F. Independent Total Housing Unit Ratio Estimation Factor

Before application of the ITHUREF, the weight is equal to BASICWGT x FINWCF x SAMPFAC x TAF.

Provide a hard copy containing the following information:

- C Weighted estimates of occupied housing units, vacant UREs, total interviews, out-of-scopes, Type A noninterviews, Type B noninterviews, Type C noninterviews and total units for each geographic area before applying the factor.
- C Independent estimates in MSAs.
- C Independent total housing unit ratio estimation factors.
- C Weighted estimates of occupied housing units, vacant UREs, total interviews, out-of-scopes, Type A noninterviews, Type B noninterviews, Type C noninterviews, and total units for each geographic area after applying the factor.
- C A line containing separate totals across all geographic areas of
 - (a) occupied units before and after applying the factor,
 - (b) total units before and after applying the factor,
 - (c) independent estimates,
 - (d) the overall independent total housing unit ratio estimation factor.

Refer to Attachment E (Table 5) for an example of the output format.

G. Additional Requests

1. Refer to Table 6 in Attachment E.

To complete this table, classify all vacants as either owner or renter units. (Refer to the definition of tenure status.)

Provide DSMD with this table run separately for each MSA by each of the following:

- C Weighted and unweighted central city* counts,
- C Weighted and unweighted balance* counts,
- C Weighted and unweighted counts of each geographic area,
- C Weighted and unweighted occupied units, excluding vacants/UREs.
- C Unweighted Total MSA counts,
- C Total MSA counts weighted only by the base weight,
- C Total MSA counts weighted using the final weight.

This table may also be requested at the county level at a later date.

2. Median Suppression Threshold

Provide DSMD and HHES with the following information in the format of Table 7 in Attachment E.

- C Unweighted count of interviews (occupied, vacant and ure).
- C Independent estimate.

$$\text{Median Suppression Threshold} = \frac{\text{Independent Estimate}}{\text{Unweighted Interviews}} \times 25$$

- C Median suppression threshold where

3. Provide DSMD with a SAS file of all data (including all factors, variables and the final weight) needed to derive the counts in all of the weighting tables.

If you have any questions, please contact Gayle Weant, Room 3785/3, ext. 1972.

Attachments (5)

cc:	A. Jean (2)	(DSD)	C. Alexander	(DSMD)
	T. Blatt (2)	"	D. Schwanz	"
	M. Butler	"	C. Mylet	"
	J. Nguyen	"	G. Weant	"
	J. Kneessi	(HHES)		

DSMD/LSB/GWeant/glw/k:\ahs99\6msn.wpd

Table 1. Definition of Six Special Areas for AHS-MS/N

AREA (AHS-MS Code)	STATE	FIPS STATE and COUNTY CODE¹	COUNTY
Chicago (1007)	Illinois	17031 17043 17063 17089 17093 17097 17111 17197	Cook Du Page Grundey Kane Kendall Lake McHenry Will
Detroit (1013)	Michigan	26087 26093 26099 26115 26125 26147 26163	Lapeer Livingston Macomb Monroe Oakland St. Clair Wayne
Los Angeles (1019)	California	06037	Los Angeles
New York (1025)	New York	36005 36047 36059 36061 36071 36079 36081 36085 36087 36103 36119	Bronx Kings Nassau New York Orange Putnam Queens Richmond Rockland Suffolk Westchester
Northern New Jersey (1027)	New Jersey	34003 34013 34017 34019 34021 34023 34025 34027	Bergen Essex Hudson Hunterdon Mercer Middlesex Monmouth Morris

AREA (AHS-MS Code)	STATE	FIPS STATE and COUNTY CODE¹	COUNTY
		34029 34031 34035 34037 34039	Ocean Passaic Somerset Sussex Union
Philadelphia (1029)	New Jersey Pennsylvania	34005 34007 34015 42017 42029 42045 42091 42101	Burlington Camden Gloucester Bucks Chester Delaware Montgomery Philadelphia

¹ For all areas except Chicago and Los Angeles, the 1990 PSU code for both the 1980 and 1990 design sample units is a combination of the FIPS State and County code. In Chicago and Los Angeles, the 1990 PSU code for the 1990 design sample units is also a combination of the FIPS State and County Code. However, the 1990 PSU codes for the 1980 design sample units are 06037 (Central City) and 06999 (Balance) for Los Angeles, and 17308 (Cook and part of Du Page counties - Chicago City) and 17398 (Du Page (balance), Grundy, Kane, Kendall, Lake, McHenry, and Will counties) for Chicago.

Table 2. Base Weights for AHSBMS/N Records

Segment Type	Segment Type Code	Base Weight
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Special Place AHS GQ Code 76, 92, 94 All Other AHS GQ Codes	02	2148.11839 3068.74056
HUCS	06	Available from MHT ¹
Coverage Improvement B Address	08	Available from MHT
Coverage Improvement B Area 1980 Permit Issuing (P) 1980 NonBPermit Issuing (NP) 1980 Permit Issuing (P) 1980 NonBPermit Issuing (NP) 1980 Permit Issuing (P) 1980 NonBPermit Issuing (NP) 1990 Permit Issuing (P) 1990 Non-Permit Issuing (NP)	07	Year of Introduction # 1987 3222.17759 2148.11839 Year of Introduction = 1989 2577.74207 1841.24433 Year of Introduction = 1991 2148.11839 1841.24433 Year of Introduction ≥ 1993 4296.23678 2148.11839
All Other Segments Address Unit Permit	01 03 04 ²	2148.11839

¹ Word 57 character 1 through word 59 character 1.

² We assume that the 1990-based permit segments have a segment type code of 04.

Table 1. 1999 AHS-MS/N Sample Adjustment Factors for Group 1

City (AHS-MS Code)	Segment Type	Segment Type Code	Sample Adjustment Factors	
			Other Urban	Rural
Los Angeles (1019)	Address Segments	1	.741379	.741379
	Special Place GQ Codes 63, 65, 71, 73,75-81	2	N/A	N/A
	All Other GQ Codes	2	N/A	N/A
	Unit Segment	3	N/A	1.00
	Permit Segments 1980 (Sampleyr=80)	4	.741379	.741379
	1990 (Sampleyr=90)	4	N/A	1.00

Note: N/A (Not Applicable) is used when there is no sample in the specific category. There are no GQ segments in the Los Angeles supplemental sample for other urban/rural cases and no unit and permit segment cases in the Los Angeles supplemental sample for other urban areas. Sample cases in any other segments will retain the sample adjustment factors used in the AHS-N weighting.

Table 2. Sample Adjustment Factors for 1999 AHS-MS/N Records in Specific PSU / Segment Type Combinations in the New York/New Jersey Metropolitan Areas (PSUs 34003, 34013, 36059, 36119) for Group 2

Segment Type	Segment Type Code	Sample Adjustment Factor
Special Place Segments*	2	1.0
HUCS Segments*	6	1.0
CI (Area) Segments*	7	1.0
CI (Address) Segments	8	1.0
Address Segments	1	<p>PSUs 34003, 36059, 36119: renters in urban areas²: 0.425743 renters in rural areas³: 1.0 owners in all areas⁴: 1.0</p> <p>PSU 34013: renters in urban central city⁵: 0.425743 renters in other urban areas⁶: 1.0</p>

-
- ² **Renters in Urban Areas** - Supplemental sample units (in address segments in PSUs 34003, 36059, and 36119 of the New York and Northern New Jersey metropolitan areas) having a value of 20 - 43 in 1980 design stratum code INSTRAS80 and a value of 1 in 1980 design urban/rural code URBRUR80 on the AHS-N master file.
- ³ **Renters in Rural Areas** - Supplemental sample units (in address segments from the New York and Northern New Jersey metropolitan areas) having a value of 20 - 43 in 1980 design stratum code INSTRAS80 and a value of 2 in 1980 design urban/rural code URBRUR80 on the AHS-N master file.
- ⁴ **Owners in All Areas** - Supplemental sample units (in address segments from the New York/Northern New Jersey metropolitan areas) having a value of 1 - 19, 44- 49 in 1980 design stratum code INSTRAS80 on the AHS-N master file.
- ⁵ **Renters in Urban Central City** - Supplemental sample units (in address segments in PSU 34013 of the Northern New Jersey metropolitan area) having a value of 20 - 43 in 1980 design stratum code INSTRAS80, a value of 1 in 1980 design urban/rural code URBRUR80, and a value of 1 in 1980 design MSA Status variable MSASTAS80 on the AHS-N master file.
- ⁶ **Renters in Other Urban Areas** - Supplemental sample units (in address segments in PSU 34013 of the Northern New Jersey metropolitan area) having a value of 20 - 43 in 1980 design stratum code INSTRAS80, a value of 1 in 1990 design urban/rural code URBRUR80, and a value of 2 or 3 in 1980 design MSA Status variable MSASTAS80 on the AHS-N master file.

Attachment B

Segment Type	Segment Type Code	Sample Adjustment Factor
		renters in rural areas: 1.0 owners in all areas: 1.0
Unit Segments*	3	1.0
1980 Design Permit Segments	4	1.0
1990 Design Permit Segments	4	1.0

Table 3. Sample Adjustment Factor for 1999 AHS-MS/N Records in Specific PSU / Segment Type Combinations in the Los Angeles Metropolitan Area⁶ for Group 2

Segment Type	Segment Type Code	Sample Adjustment Factor
Special Place Segments	2	1.0
HUCS Segments	6	1.0
CI (Area) Segments	7	1.0
CI (Address) Segments	8	1.0
Address Segments	1	urban inside urbanized areas: 0.425743 other urban areas & rural areas: 1.0
Unit Segments	3	urban inside urbanized areas: 1.0 other urban areas & rural areas: 1.0
1980 Design Permit Segments	4	urban inside urbanized areas: 0.425743 other urban areas & rural areas: 1.0
1990 Design Permit Segments	4	urban inside urbanized areas: 1.0 other urban areas & rural areas: 1.0

NOTE: Although the SAFs for other urban areas and rural areas for Group 2 are not needed for the 1999 AHS-MS/N weighting procedure, we want to keep the SAF section for Los Angeles the same as the SAF section in the 1999 AHS-N weighting spec for these cases since DSD is planning to use the same code from AHS-N.

⁶

Use these SAFs for PSUs 06037 (1980 and 1990 design units) and 06999 (1980 design units).

Table 4. Sample Adjustment Factor for 1999 AHS-MS/N Records in Specific PSU / Segment Type Combinations in the Philadelphia, Chicago and Detroit Metropolitan Areas⁷ for Group 2

Segment Type	Segment Type Code	Sample Adjustment Factor	
		Urban	Rural
Special Place Segments	2	1.0	1.0
HUCS Segments	6	1.0	1.0
CI (Area) Segments	7	1.0	1.0
CI (Address) Segments	8	1.0	1.0
Address Segments	1	0.425743	0.425743
Unit Segments	3	1.0	0.5
1980 Design Permit Segments	4	0.425743	0.425743
1990 Design Permit Segments	4	1.0	0.5

⁷

Use these SAFs for the following PSUs:

Philadelphia - 34005, 34007, 34015, 42017, 42029, 42045, 42091, 42101

Chicago - 17308, 17398 (1980 design units)

Chicago - 17031, 17043, 17063, 17089, 17093, 17097, 17111, 17197 (1990 design units)

Detroit - 26087, 26093, 26099, 26115, 26125, 26147, 26163.

**Table 1. Type A Noninterview Cells and Scale Values
for Owner-Occupied or Owner Vacant Units
With Previous Data Available**

Sector	Size of Structure	Value	Number of Rooms			
			1-4	5	6	7+
Central City	1 unit structure	< 100,000	7	4	2	1
		100,000-199,999	32	24	17	15
		>= 200,000	77	62	50	49
	2+ unit structure		127	114	107	105
Balance	1 unit structure	< 100,000	207	204	202	201
		100,000-199,999	232	224	217	215
		>= 200,000	277	262	250	249
	2+ unit structure		327	314	307	305

**Table 2. Type A Noninterview Cells and Scale Values
for Renter-Occupied, Renter Vacant or Year Round, Seasonal
and Migratory Vacants With Previous Data Available**

		Number of Rooms				
		1-2	3	4	5	6+
Central City	1 unit structures	1	4	5	10	11
	2-4 unit structures	22	25	26	31	32
	5-19 unit structures	54	57	58	63	64
	20+ unit structures	71	74	75	80	81
Balance	1 unit structures	201	204	205	210	211
	2-4 unit structures	222	225	226	231	232
	5-19 unit structures	254	257	258	263	264
	20+ unit structures	271	274	275	280	281

**Table 3. Type A Noninterview Adjustment Cells and Scale Values
for Units with No Previous Data Available**

Type of Units/Segments			Central City	Balance	
				Urban	Rural
All Segments (except Permit Segments)		Owner	2	6	7
		Renter	1	10	11
Permit Segments	Old New Construction	Owner	43	50	51
		Renter	42	56	57
	New New Construction	Owner	73	82	83
		Renter	72	90	91

Table 1. Independent Estimates for Each Geographic Area of Each MSA

Geography	Area	State/County Codes	Independent Estimates
CHICAGO			
Cook, IL	Area 1	17031	2,065,644
Dupage, IL	Area 2	17043	340,176
Grundy, Kendall and Will, IL	Area 3	17063, 17093, 17197	197,327
Kane, IL	Area 4	17089	141,785
Lake, IL	Area 5	17097	225,401
McHenry, IL	Area 6	17111	90,407
DETROIT			
Lapeer and St. Clair, MI	Area 1	26087, 26147	98,478
Livingston and Macomb, MI	Area 2	26093, 26099	376,711
Monroe, Oakland and Wayne, MI	Area 3	26115, 26125, 26163	1,401,464
NEW YORK			
Bronx, NY	Area 1	36005	446,861
Kings, NY	Area 2	36047	868,424
Nassau, NY	Area 3	36059	451,941
New York, NY	Area 4	36061	790,466
Orange and Putnam, NY	Area 5	36071, 36079	156,984
Queens, NY	Area 6	36081	790,214
Richmond, NY	Area 7	36085	153,530
Rockland, NY	Area 8	36087	94,785
Suffolk, NY	Area 9	36103	517,478
Westchester, NY	Area 10	36119	345,180
NORTHERN NEW JERSEY			
Bergen and Union, NJ	Area 1	34003, 34039	521,650
Essex and Morris, NJ	Area 2	34013, 34027	473,443
Hudson, NJ	Area 3	34017	230,584
Hunterdon and Somerset, NJ	Area 4	34019, 34035	157,836

Geography	Area	State/County Codes	Independent Estimates
Mercer, NJ	Area 5	34021	131,615
Middlesex and Ocean, NJ	Area 6	34023, 34029	516,495
Monmouth, NJ	Area 7	34025	240,075
Passaic, NJ	Area 8	34031	175,215
Sussex, NJ	Area 9	34037	55,160
LOS ANGELES			
Los Angeles, CA	Area 1	06037	3,278,538
PHILADELPHIA			
Bucks, PA	Area 1	42017	226,458
Chester, PA	Area 2	42029	164,000
Delaware, PA	Area 3	42045	218,013
Montgomery, PA	Area 4	42091	294,263
Philadelphia, PA	Area 5	42101	667,296
Burlington, NJ	Area 6	34005	161,467
Camden, NJ	Area 7	34007	200,028
Gloucester, NJ	Area 8	34015	93,703

Table 1. Total Housing Units (Group 2)

	Total Housing Units	
	Weighted	Unweighted
Chicago (1007)		
Detroit (1013)		
New York (1025)		
Northern New Jersey (1027)		
Philadelphia (1029)		

Table 2. Total Housing Units in Urbanized Areas (Group 2)

	Total Housing Units	
	Weighted	Unweighted
Los Angeles (1019)		

Table 3. Format for Type A Noninterview Adjustment Output Before Collapsing

of Units/Segments		Central City	Balance	
			Urban	Rural
gments (except Segments)	Owner	UIC UNIC TAF WIC WNIC SCALE	UIC UNIC TAF WIC WNIC SCALE	UIC UNIC TAF WIC WNIC SCALE
	Renter	UIC UNIC TAF WIC WNIC SCALE	UIC UNIC TAF WIC WNIC SCALE	UIC UNIC TAF WIC WNIC SCALE
Segments	Old New Construction	Owner	UIC UNIC TAF WIC WNIC SCALE	UIC UNIC TAF WIC WNIC SCALE
		Renter	UIC UNIC TAF WIC WNIC SCALE	UIC UNIC TAF WIC WNIC SCALE

of Units/Segments		Central City	Balance	
			Urban	Rural
New New Construction	Owner	UIC UNIC TAF WIC WNIC SCALE	UIC UNIC TAF WIC WNIC SCALE	UIC UNIC TAF WIC WNIC SCALE
	Renter	UIC UNIC TAF WIC WNIC SCALE	UIC UNIC TAF WIC WNIC SCALE	UIC UNIC TAF WIC WNIC SCALE

UIC	=	Unweighted Interview Count
UNIC	=	Unweighted Noninterview Count
TAF	=	Type A Noninterview Adjustment Factor
WIC	=	Weighted Interview Count
WNIC	=	Weighted Noninterview Count (before the factor is applied)
SCALE	=	Scale Value

Table 4. Format for Type A Noninterview Adjustment Output

Provide a printout sorted by scale value of the following counts for each cell before and after collapsing except $WFIC_i$ and $WFNIC_i$ (provide these counts **only** after collapsing):

$SCALE_1$	$CSCALE_1$	UIC_1	$UNIC_1$	TAF_1	WIC_1	$WNIC_1$	$WFIC_1$
$SCALE_2$	$CSCALE_2$	UIC_2	$UNIC_2$	TAF_2	WIC_2	$WNIC_2$	$WFIC_2$
$SCALE_3$	$CSCALE_3$	UIC_3	$UNIC_3$	TAF_3	WIC_3	$WNIC_3$	$WFIC_3$

.
.
.
SCALE _i	CSCALE _i	UIC _i	UNIC _i	TAF _i	WIC _i	WNIC _i	WFIC _i
							WF
							NIC _i
							TOTAL

- SCALE_i = ith Cell Scale Value
 CSCALE_i = ith Collapsed Scale Value
 UIC_i = ith Unweighted Interview Count *Before* the Factor is Applied
 UNIC_i = ith Unweighted Noninterview Count *Before* the Factor is Applied
 TAF_i = ith Type A Noninterview Adjustment Factor
 WIC_i = ith Weighted Interview Count *Before* the Factor is Applied
 WNIC_i = ith Weighted Noninterview Count *Before* the Factor is Applied
 WFIC_i = Weighted Interview Count *After* the Factor is Applied
 WFNIC_i = Weighted Noninterview Count *After* the Factor is Applied

Table 5. Format of ITHUREF Output**MSA NAME**

		Area 1	Area 2 Area N	Total
Before ITHUREF is Applied	Occupied Interviews			
	Vacant/URE-in scope			
	Total Interviews			
	Out-of-scope Interviews			
	Type A Noninterviews			
	Type B Noninterviews			
	Type C Noninterviews			
	Total			
Independent Estimate				
ITHUREF				
After ITHUREF is Applied	Occupied Interviews			
	Vacant/URE-in scope			
	Total Interviews			
	Out-of-scope Interviews			
	Type A Noninterviews			
	Type B Noninterviews			

Attachment C

Type C Noninterviews			
Total			

Table 6.

Type of Segment	Out-of-Scope Interviews	In Scope Interviews			Noninterviews		
		Renter	Owner	Total	Type A	Type B	Type C
Address							
Group Quarters							
Unit							
Permit Old New Construction							
New New Construction							
Other Segments (HUCS and CI)							
Total							

Table 7. Median Suppression Threshold Output Format

MSA	Unweighted Interviews (occ., vac., ure)	Independent Estimate	Median Suppression Threshold
Chicago (1007)			
Detroit (1013)			
New York (1025)			
Northern New Jersey (1027)			
Los Angeles (1019)			
Philadelphia (1029)			

GLOSSARY OF WORD ABBREVIATIONS

Abbreviations	B	Phrase
AHSBMS		B American H ousing Survey B M etropolitan Sample
AHSBN		B American H ousing Survey B N ational Sample
AHS-MS/N		B American H ousing Survey - M etropolitan Sample / N ational
BW		B B ase W eight
CI		B C overage I mprovement
DSD		B D emographic S urveys D ivision
DSMD	B	D emographic S tatistical M ethods D ivision
FIPS		B F ederal I nformation P rocessing S tandards
GQ		B G roup Q uarters
HHES		B H ousing and H ousehold E conomic S tatistics division
HU		B H ousing U nit
HUCS		B H ousing U nits C overage S tudy
ITHUREF		B I ndependent T otal H ousing U nit R atio E stimation F actor
MSA		B M etropolitan S tatistical A rea
NC		B N ew C onstruction
NI		B N on I nterview
PMSA		B P rimary M etropolitan S tatistical A rea
PSU		B P rimary S ampling U nit
SAMPFAC		B S ample A ddjustment F actor
SCALE		B S cale V alue
TAF		B T ype A N oninterview A ddjustment F actor
UIC		B U nweighted I nterview C ount
UNIC		B U nweighted N oninterview C ount
URE		B U sual R esidence E lsewhere
WCF		B W eighting C ontrol F actor
WFIC		B W eighted I ntervi w C ount after the factor is applied
WFNIC		B W eighted N oninterview C ount after the factor is applied
WIC		B W eighted I nterview C ount before the factor is applied
WNIC		B W eighted N oninterview C ount before the factor is applied

GLOSSARY

Address Segment

An address segment is made up of housing units in areas where most of the address listings contain complete addresses. Units in an address segment have a value of 1 in segment type variable **segmtype** on the AHS-N master file. See Segment Type.

Balance

See Sector.

Base Weight (BW)

A base weight indicates how many units in the population are represented by each unit in the sample. It equals the inverse of the probability of selection for a housing unit.

Basic Sample

Includes all of the F4 sample cases except cases dropped during the 15% across-the-board reduction and includes the F8 sample (Coverage Improvement).
(See Supplemental Sample for reduction group codes.)

Census Design for Permit Segments

To distinguish the difference in census design for permit segments, use the variable **sampleyr**.
(1980 design permit segments: **sampleyr**=80)
(1990 design permit segments: **sampleyr**=90)

Central City

See Sector.

Coverage Improvement Address Segment

A CI (address) segment is made up of housing unit additions in address enumeration districts (EDs) that have been added to the housing inventory since the 1980 Census. This includes all additions except new construction (which are included in the permit segment frame (see Permit Segment)). Units in this segment have a value of 8 in segment type variable **segmtype** on the AHS-N master file. See Segment Type.

Coverage Improvement Area Segment

A CI (area) segment is made up of housing unit additions in area EDs that have been added to the housing inventory since the 1980 Census. This includes all additions in

- ! Permit issuing CI (area) segments except new construction (which are included in the permit segment frame (see Permit Segment)) and
- ! Non-permit issuing CI (area) segment including new construction.

Units in a CI (area) segment have a value of 7 in segment type variable **segmtype** on the AHS-N master file.

See Segment Type.

Current Enumeration

Units sent out to be interviewed in the current year. Use the variable **cyenum**.

1 = Enumerated

2 = Not enumerated

Group Quarters Code

Used to apply the base weight in special place segments. Use the variable **gqtype**.

0 = vacant or occupied housing unit (NA)

1 - 98 = type of group quarters

For a definition of the values of gqtype refer to the 1980 Census 100-percent Final Detail File.

HUCS Segment

A HUCS segment is made up of housing units that were missed or inadequately defined in the 1980 Census but were identified by the Housing Unit Coverage Study. Units in this segment have a value of 6 in segment type variable **segmtype** on the AHS-N master file. See Segment Type.

Interviewed Housing Units

Interviewed housing units consist of units that are

C regular occupied - variable **status** has a value of 1; Use recode **typint** = 1.

C URE occupied - variable **status** has a value of 2; Use recode **typint** = 2.

C vacant - variable **status** has a value of 3; Use recode **typint** = 3.

C out-of-scope - Use recode **typint** = 4.

MSA Status

MSA status for housing units is determined by the 1980 design variable **msasta80** on the AHS-N master file. See Sector.

New New Construction

Units in the permit segments where

For Basic: **yrintro** = **survyr** or **yrintro** = **survyr** - 2

For Supplemental: **yrintro** = **survyr**

Number of Rooms

For **prior year data**, use the variable **pyrooms**:

Range of values: 1-23

For **current year data**:

Sum the values of the following variables to determine the appropriate number of rooms: **bedrms**, **kitch**, **living**, **dining**, **famrm**, **rearm**, **dens**, **busin** and **othfn**.

Old New Construction

Units in the permit segments where

For Basic: **yrintro** not = **survyr** and **yrintro** not = **survyr** -2

For Supplemental: **yrintro** not = **survyr**

Other Urban/Rural

Combined geography which includes urban-outside urbanized areas or rural areas.

Out-of-Scope Units

Units having a value of 5, 7, 8, or 9 in variable **type** and a value of 2 or 3 in variable **status**. Use recode **typint** = 4. This refers to URE/vacants in permanent housing units in transient hotels or motels; boats; recreational vehicles; caves; or tents and railroad cars.

Outside Urbanized Area

See Urbanized Area Code.

Owner-Occupied Units

See Tenure.

Owner Vacants

See Tenure.

Permit Segment

A permit segment is made up of conventional HUs in the public and private sectors for which building permits were issued and the units were built since the 1980 Census. See Segment Type.

Reduction Group Code

See Supplemental Sample.

Renter-Occupied Units

See Tenure.

Renter Vacants

See Tenure.

Rural

See Urban/Rural.

Sample Adjustment Factor (SAF)

A sample adjustment factor adjusts the weight on the appropriate units since the base weights assigned on the AHS-N master file were calculated based on only using the basic sample for AHS-N:

1. if supplemental sample (i.e., rural and metropolitan) is used; or

2. if there is some other adjustment to the sample.

Sample Designation

An alphanumeric code (F4, F5 or F8) assigned to units to indicate survey and sample. Use the variable **sample**.

Scale Values

Scale values are assigned to each cell to indicate the order and priority in which one cell will collapse with another. When a cell does not meet the criteria specified in the collapsing instructions, it must collapse with at least one other cell.

Seasonal and Migratory Vacants

If vacant at the time of a prior year interview, use the variable **pyvacncy** = 8, 9, 10 or 11.

If vacant at the time of the AHS-N interview, use the variable **vacancy** = 8, 9, 10 or 11.

Sector (Balance/Central City)

Old Construction and 1980 Design Permit Segments

Determine sector designation for old construction units by the variable **msasta80**.

- 1 = Inside Central City
- 2 = Outside Central City (Balance MSA)
- 3 = Outside MSA (Non-MSA)

1990 Design Permit Segments

Determine sector designation for new construction units by the variable **cbncod90**.

- 1 = 1990 Central City
- 2, 3 = Balance
- Blank for Old Construction.

Segment Type

A frame to which a segment belongs.

Identify the segment a unit is in by the variable **segmtype**.

- | | |
|------------------------|------------------------------------|
| 1 = Address | 6 = HUICS |
| 2 = GQ (Special Place) | 7 = Coverage Improvement - Area |
| 3 = Unit | 8 = Coverage Improvement - Address |
| 4 = Permit | |

Special Place Segment

A special place segment is made up of units that are different from a usual private home or apartment. Examples of units in special place segments include hospitals, hotels, motels, jails, orphanages, large rooming or boarding homes, college dormitories, fraternity and sorority houses, military barracks, and monasteries. Units in this segment have a value of 2 in segment type variable **segmtype** on the AHS-N master file. See Segment Type.

Stratum Code

A stratum code is assigned to a housing unit based on tenure (owner/renter/vacant) and number of rooms in structure during sample selection. For the supplemental sample from the New York/Northern New Jersey metropolitan area, stratum code is determined by the 1980 design variable **instra80** on the AHS-N master file.

Supplemental Sample

Includes all F5 sample cases and the F4 sample cases with the following reduction group codes: 1, 8, 15, 22, 29, 36, 43, 50, 57, 64, 71, 78, 85, 92 and 99.

For data prior to 95 National, use the variable **redgrp80**.

Range of values: 000-101

For new permits use, **redgrp90**.

Range of values: 001-101

For 99 AHS-MS/N, DSMD used this definition of supplemental sample. DSD used **supsmfpg** = 1 or 3 to verify the flag is correct.

Supplemental Sample Flag

The supplemental sample flag is used to designate the AHS-N sample, determined by the variable **supsmfpg**.

1 = In the MS supplement only (F4s and F5s)

2 = In the rural supplement only (F5s)

3 = In both the MS and rural supplement (F5s)

blank value = basic sample

Tenure Status

If you use **prior year data**:

Owner: If occupied at the time of a prior year interview, use the variable **pytenure** = 1

or

If vacant at the time of a prior year interview, use the variable **pyvacncy** = 3 or 5.

Renter: If occupied at the time of a prior year interview, use the variable **pytenure** = 2 or 3

or

If vacant at the time of a prior year interview, use the variable

pyvacncy = 1, 2, or 4.

If you use **current year data**:

Owner: If occupied at time of AHS-N interview use the variable **tenure** = 1
or
If vacant at time of AHS-N interview use the variable **vacancy** = 3 or 5.

Renter: If occupied at time of AHS-N interview use the variable **tenure** = 2 or 3
or
If vacant at time of AHS-N interview use the variable **vacancy** = 1, 2 or 4.

Type A Noninterview Units

Units having a value of 1, 2, 3, 4, 5 or 6 in variable **noint**.
Use recode **typint** = 5 or 6.

Type B Noninterview Units

Units having a value of 10, 11, 12, 13, 14, 15, 16, or 17 in variable **noint**. Use recode **typint** = 7.

Type C Noninterview Units

Units having a value of 30, 31, 32, 33, 36, 37, or 38 in variable **noint**. Use recode **typint** = 9.

Unit Segment

A unit segment is made up of housing units in mostly rural areas where more than four percent of the addresses contained in the listings are incomplete or new construction is not monitored by building permits. Units in this segment have a value of 3 in segment type variable **segmtype** on the AHS-N master file. See Segment Type.

Units in Structure

If you use **prior year data**:

1 unit: **pynunits** = 1

2 - 4 units: **pynunits** = 2, 3 or 4

5 - 19 units: **pynunits** = 5 or 6 or, . . . , or 19

20+ units: **pynunits** >= 20.

If you use **current year data**:

1 unit: **nunit2** = 1, 2, 4 and **nunits** = 1

2 - 4 units: **nunit2** = 3 or 5 and **nunits** = 2, 3, or 4

5 - 19 units: **nunit2** = 3 or 5 and **nunits** = 5 or 6 or, . . ., or 19

20+ units: **nunit2** = 3 or 5 and **nunits** >= 20.

Urban/Rural

For Old Construction and 1980 and 1990 Design Permit Segments, use the variable **urbrur80**. This variable is filled in for the geography code conversion for 1990 redesign.

Urban=1 Rural=2

Urbanized Area Code

A code which identifies an area consisting of a central place (or places) and the surrounding closely settled territory (urban fringe) that together have a minimum population of 50,000 as of the 1990 census.

For 1980 Design Permit Segments, use the variable **uacode80**.

Urbanized areas: 0001-9999

Not in urbanized areas: 0

For 1990 Design Permit Segments, use the variable **uacode90**.

Urbanized areas: 0001-9998

Not in an urbanized area: 9999

Usual Residence Elsewhere (URE)

Units having a value of 2 in variable **status**. Use recode **typint** = 2.

Vacant Units

Units having a value of 3 in variable **status**. Use recode **typint** = 3.

Value

Units having a value in the variable **value** indicating the purchase price.

Weighting Control Factor (WCF)

A weighting control factor adjusts the probability of selection to reflect subsampling that takes place after the initial sample selection. These factors are obtained from Field and from files (containing large cluster subsampling) provided by DSMD on the AHS-N master file.

Year of Introduction

The survey year when the unit first came into sample. Use the variable **yrintro**.

Year Round Vacants

If vacant at the time of a prior year interview, use the variable **pyvacncy** = 6, 7.

If vacant at the time of the AHS-N interview, use the variable **vacancy** = 6, 7.

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ATTACHMENTS

GLOSSARY OF WORD ABBREVIATIONS

GLOSSARY